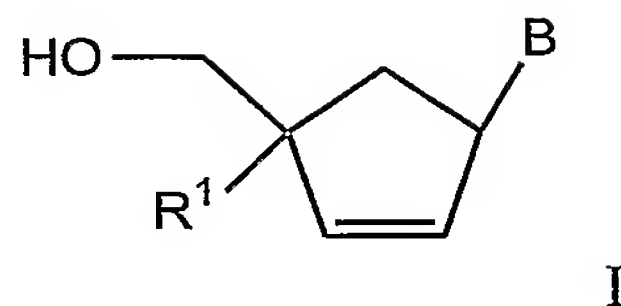


Claims

What is claimed is:

1. A compound of Formula I:

5



wherein:

- B is adenine, guanine, cytosine, uracil, thymine, 7-deazaadenine, 7-deazaguanine, 7-deaza-8-azaguanine, 7-deaza-8-azaadenine, inosine, nebularine, nitropyrrole, nitroindole, 2-aminopurine, 2-amino-6-chloropurine, 2,6-diaminopurine, hypoxanthine, pseudouridine, pseudocytosine, pseudoisocytosine, 5-propynylcytosine, isocytosine, isoguanine, 7-deazaguanine, 2-thiopyrimidine, 6-thioguanine, 4-thiothymine, 4-thiouracil, *O*⁶-methylguanine, *N*⁶-methyladenine, *O*⁴-methylthymine, 5,6-dihydrothymine, 5,6-dihydrouracil, 4-methylindole, triazole, or pyrazolo[3,4-d]pyrimidine; and B is optionally substituted with one or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo; and
- R*¹ is alkyl, alkenyl, alkynyl, cyano, azido, or fluoromethyl;
- or a pharmaceutically acceptable salt or solvate thereof.

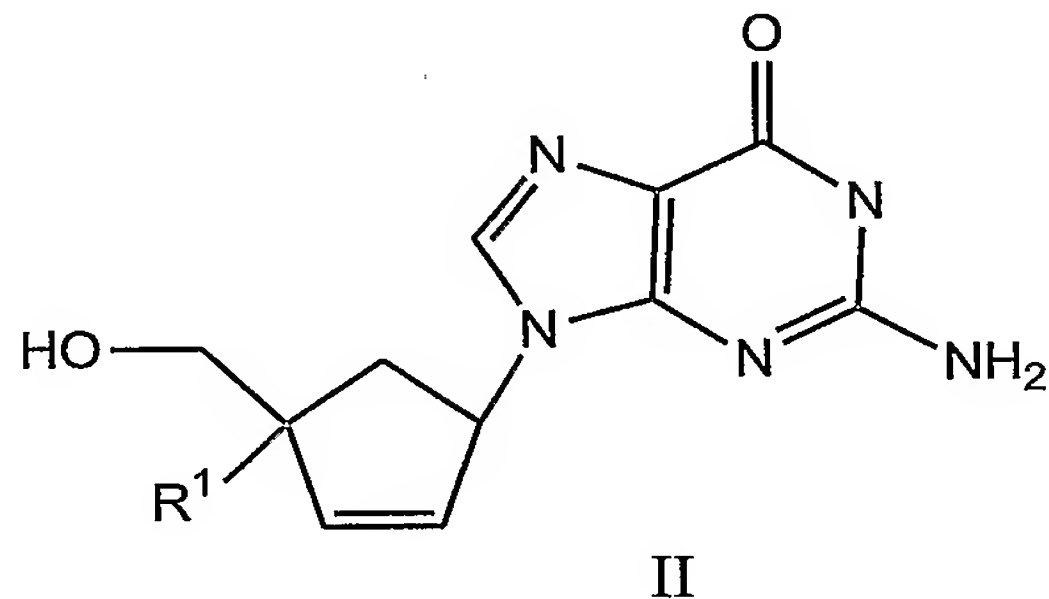
2. The compound of claim 1 wherein B is adenine, guanine, cytosine, uracil, or thymine; which B is optionally substituted with one or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo.

3. The compound of claim 1 wherein B is 7-deazaadenine, 7-deazaguanine, 7-deaza-8-azaguanine, 7-deaza-8-azaadenine, inosine, nebularine, nitropyrrole, nitroindole, 2-aminopurine, 2-amino-6-chloropurine, 2,6-diaminopurine, hypoxanthine, pseudouridine, pseudocytosine, pseudoisocytosine, 5-

propynylcytosine, isocytosine, isoguanine, 7-deazaguanine, 2-thiopyrimidine, 6-thioguanine, 4-thiothymine, 4-thiouracil, *O*⁶-methylguanine, *N*⁶-methyladenine, *O*⁴-methylthymine, 5,6-dihydrothymine, 5,6-dihydrouracil, 4-methylindole, triazole, or pyrazolo[3,4-d]pyrimidine; and B is optionally substituted with one
 5 or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo

4. The compound of claim 1 wherein B is adenine, guanine, cytosine, uracil, or thymine.

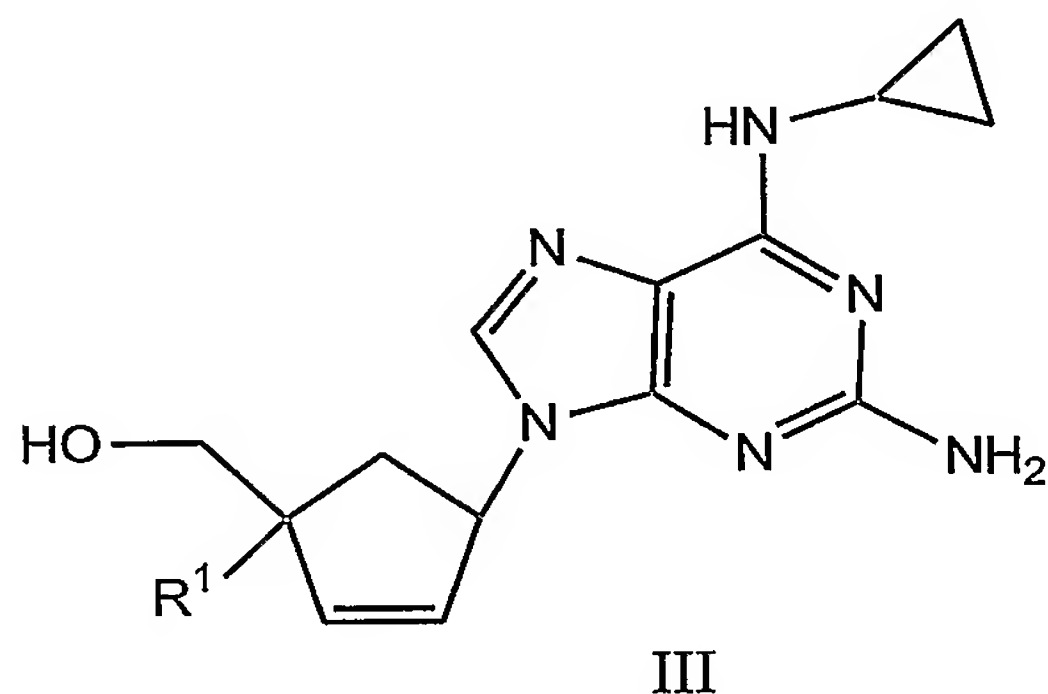
10 5. The compound of claim 1 which is a compound of formula II:



wherein R¹ has any of the values defined in claim 1.

15

6. The compound of claim 1 which is a compound of formula III:



20 wherein R¹ has any of the values defined in claim 1.

7. The compound of any one of claims 1-6 wherein R¹ is alkyl.
8. The compound of any one of claims 1-6 wherein R¹ is methyl.
- 5 9. The compound of any one of claims 1-6 wherein R¹ is fluoromethyl.
- 10 10. The compound of any one of claims 1-6 wherein R¹ is alkenyl.
11. The compound of any one of claims 1-6 wherein R¹ is vinyl.
12. The compound of any one of claims 1-6 wherein R¹ is alkynyl.
13. The compound of any one of claims 1-6 wherein R¹ is ethynyl.
- 15 14. The compound of any one of claims 1-6 wherein R¹ is cyano.
15. The compound of any one of claims 1-6 wherein R¹ is azido.
- 20 16. A pharmaceutical composition, comprising an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, and a pharmaceutically acceptable excipient.
- 25 17. A pharmaceutical composition comprising an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof; a pharmaceutically acceptable excipient; and a therapeutically effective amount of another therapeutic agent.

30

18. The pharmaceutical composition of claim 16 which further comprises an AIDS treatment agent selected from an HIV inhibitor agent, an anti-infective agent, and an immunomodulator.
19. The pharmaceutical composition of claim 16 which further comprises an
5 HIV-protease inhibitor.
20. The pharmaceutical composition of claim 16 which further comprises a reverse transcriptase inhibitor.
21. The pharmaceutical composition of claim 16 which further comprises a non-nucleoside reverse transcriptase inhibitor.
- 10 22. The pharmaceutical composition of claim 16 which further comprises an HIV integrase inhibitor.
23. A method of inhibiting a viral infection in an animal (e.g. a mammal), comprising administering to the animal, an effective amount of a compound of
15 Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
24. A method for the treatment or prevention of the symptoms or effects of a viral infection in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a
20 pharmaceutically acceptable salt or solvate thereof.
25. A method of inhibiting an HCV infection in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
- 25 26. A method for the treatment or prevention of the symptoms or effects of HCV infection in an infected animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.

27. A method of inhibiting a viral enzyme comprising contacting a sample suspected of containing viral infected cells or tissues with an effective amount of a compound of Formula I as described in any one of claims 1-15, or a
5 pharmaceutically acceptable salt or solvate thereof.
28. A method of inhibiting RNA-dependent RNA polymerase in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
- 10 29. A compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, for use in medical therapy.
30. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a
15 medicament useful for inhibiting a viral infection in an animal.
31. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for the treatment or prevention of the symptoms or effects of a viral infection in an animal.
- 20 32. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for inhibiting an HCV infection in an animal.
33. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a
25 medicament useful for the treatment or prevention of the symptoms or effects of HCV infection in an infected animal.
34. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a

medicament useful for inhibiting an RNA-dependent RNA polymerase in an animal.

35. A process for making a pharmaceutical composition comprising combining a compound of Formula I as described in any one of claims 1-15, or a
5 pharmaceutically acceptable salt or solvate thereof, and a pharmaceutically acceptable excipient.